

**NETTI**

**Wisely** Connected

**User Manual**

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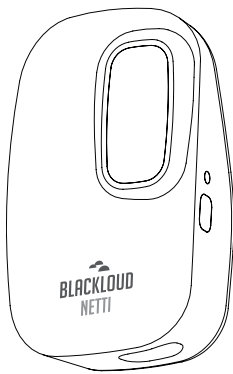


# Your NETTI

## Introduction

Your BLACKLOUD NETTI Wi-Fi Extender is a Wi-Fi device that extends the coverage of your existing internet router to more areas than your original wireless network can cover. Your NETTI is also a wireless access point that can extend a wired Ethernet network to a wireless network. Your NETTI can be accessed and configured either with its built-in web user interface or with the NETTI app for your smartphone or tablets. By creating, activating, and signing into a BLACKLOUD account, you can use the NETTI app to access and configure your NETTI away from home, from anywhere that has internet connection.

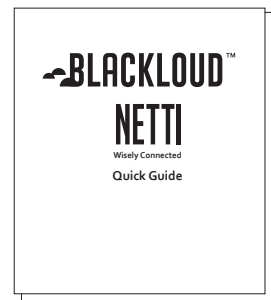
## Package Contents



NETTI Wi-Fi Extender

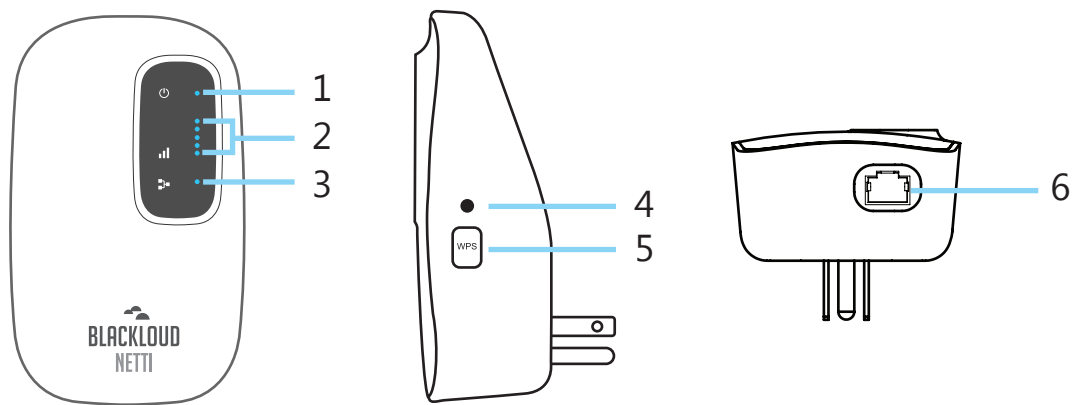


Ethernet Cable



Quick Guide

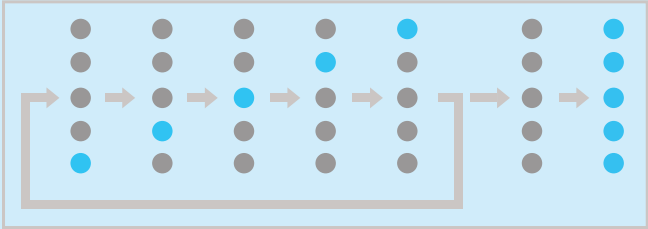
## Your NETTI



1. **Power LED:** Indicates current power status.\*
2. **Signal Strength LEDs:** Indicates current signal strength of the Wi-Fi source as well as setup indications.\*
3. **Ethernet Status LED:** Indicates the status of the Ethernet port connection.\*
4. **Reset Button:** Press (with a small-tip instrument) to reset your NETTI.
5. **WPS Button:** Press to setup your NETTI using the WPS method.
6. **Ethernet Port:** Connect to your computer to setup your NETTI using the web browser setup method, or connect to a router or an Ethernet switch to use your NETTI as a wireless access point.

\* See "LED Indicators" for more details on these LEDs.

## LED Indicators

LED Type and Status		Definition
Type	Status	
Power	Off	Power is off
	On	Power is on
Signal Strength	Off	No Wi-Fi signal
	1 to 5 bars	Wi-Fi router's signal strength (Extender Mode only)
	1 to 5 bars with the top LED flashing	Firmware upgrade progress (100% with all 5 LEDs on and solid)
	All 5 LEDs flashing	Initial setup state
	All 5 LEDs on → All 5 LEDs off	Reset to default settings
	LED 1 to 5 running	Wireless setup in progress 
	LED 1 flashing	AP Mode
Ethernet	Off	Ethernet port not connected
	On	Ethernet port connected
	Flashing	Ethernet port connected to an active device

# Getting Started

## Basic Requirements



**Internet Connection**



**Wi-Fi Router (Extender Mode or AP Mode)**



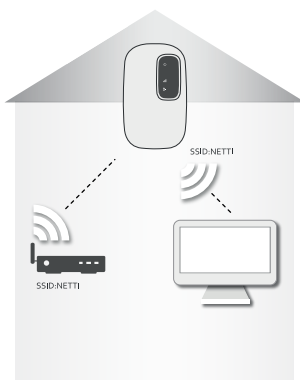
**Router (AP Mode)**

## Setting Up Extender Mode

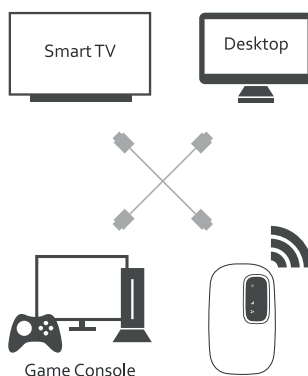
### Function

Using your NETTI in Extender Mode provides you the following functions:

- Extended Wi-Fi network for your Wi-Fi router



- Wi-Fi-to-LAN bridge for your smart TV, desktop computer, game console, etc.



Choose one of the following methods to set up Extender Mode for your NETTI:

Method One → WPS Setup

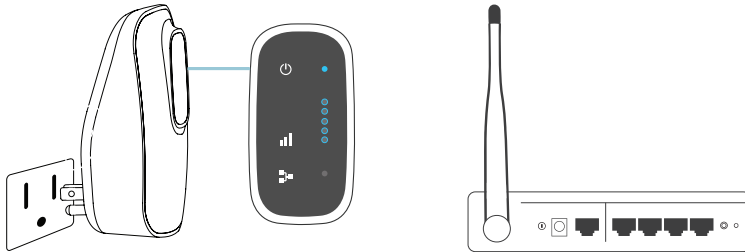
Method Two → Web Browser Setup

Method Three → APP Setup

## WPS Setup

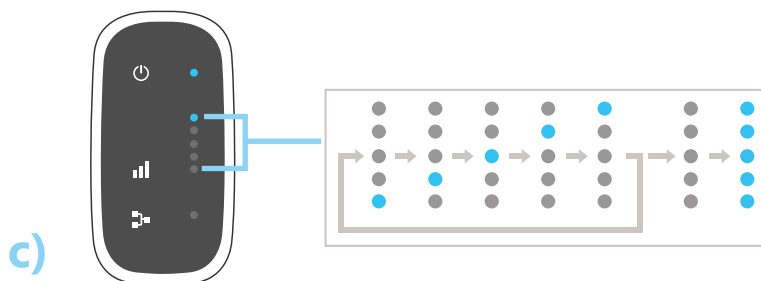
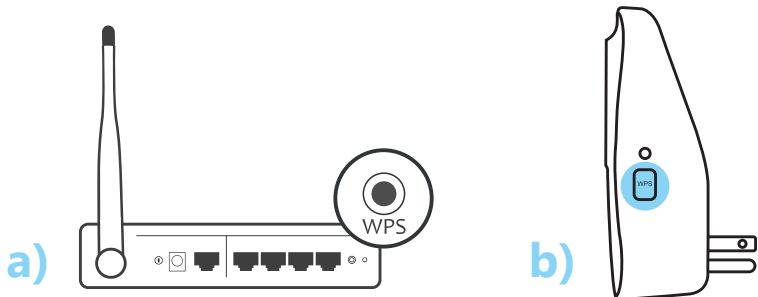
### 1. Plug your NETTI into a power outlet

Plug your NETTI into a power outlet near your Wi-Fi router. If the signal strength LEDs are either flashing (first time setup) or unlit (no signal), proceed with setup.



### 2. Push the WPS buttons

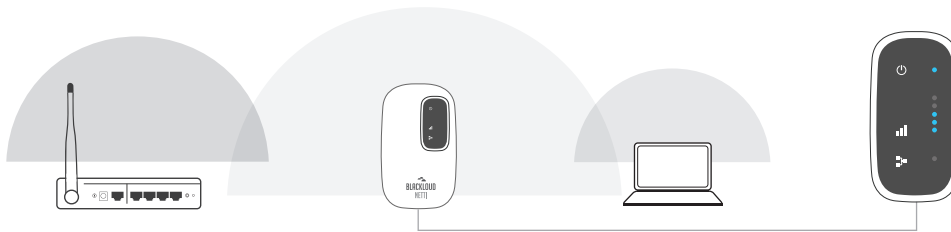
- a) Push your Wi-Fi router's WPS button.
- b) Push your NETTI's WPS button.
- c) Each of the five Signal Strength LEDs will continue to light sequentially until the Wi-Fi extension setup is finished. If the WPS setup is successful, the signal strength LEDs will display full signal strength.



NOTE: If the WPS setup fails, please use Method Two (Web Browser Setup) or Method Three (App Setup).

### 3. Move your NETTI

Plug your NETTI to an outlet where you want to extend your router's Wi-Fi connection. Your NETTI will connect to your router automatically. If the Signal Strength LED reads at least 3 bars, you can use your NETTI at this location.

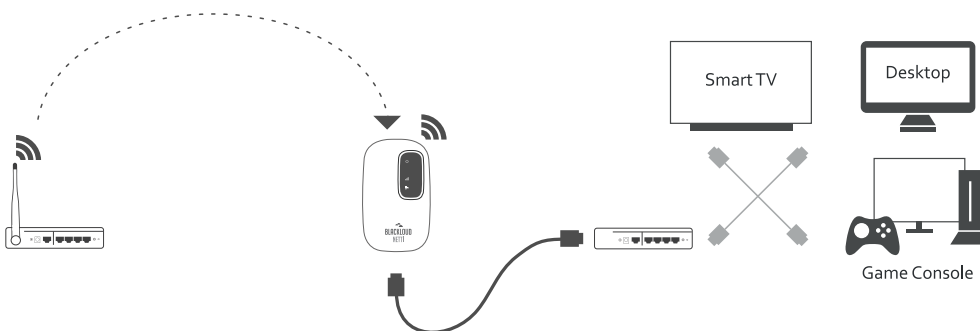


### 4. Your Wi-Fi connection is extended

- Your Wi-Fi signal now covers a wider area than before.



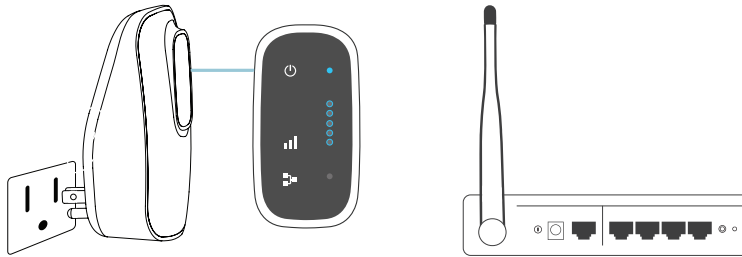
- Alternatively your NETTI can serve as a Wi-Fi-to-LAN bridge by connecting an Ethernet switch to the Ethernet port on your NETTI.



## Web Browser Setup

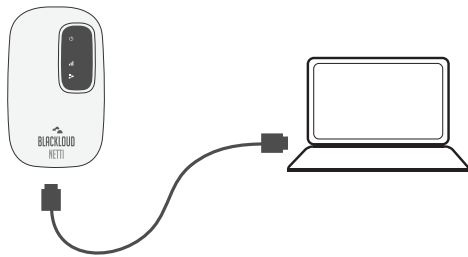
### 1. Plug your NETTI into a power outlet

Plug your NETTI into a power outlet near your Wi-Fi router. If the signal strength LEDs are either flashing (first time setup) or unlit (no signal), proceed with setup.

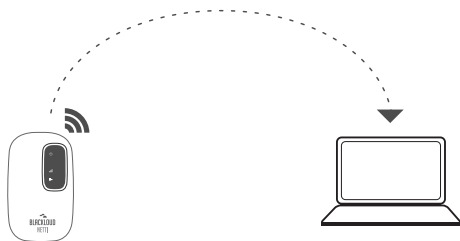


### 2. Connect your NETTI to a computer

- Connect your NETTI to your computer with the Ethernet cable.



- Alternatively, you can connect your NETTI to your computer wirelessly. Enable Wi-Fi connection on your computer. Select the SSID **NETTI\_xxxx** and click **Connect**.

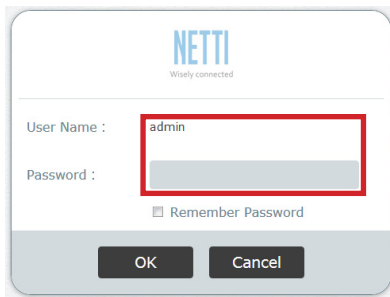


### 3. Configure your NETTI with the web-based user interface

- a) Open a web browser. Enter the default IP address <http://192.168.1.254>.

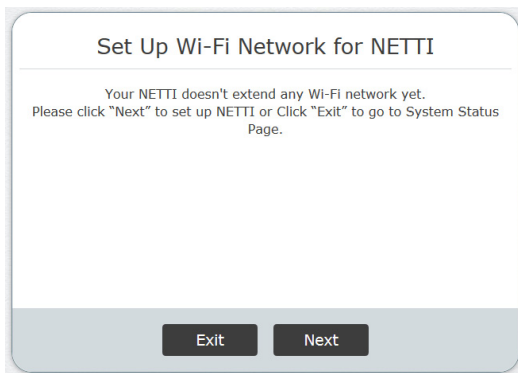
NOTE: Please refer to "Setting Your Computer to a Static IP Address" in the Appendix section if your computer is connected to your NETTI with an Ethernet cable and you cannot see the web-based user interface.

- b) Enter the default username (**admin**) and password (**admin**), then click **OK**.



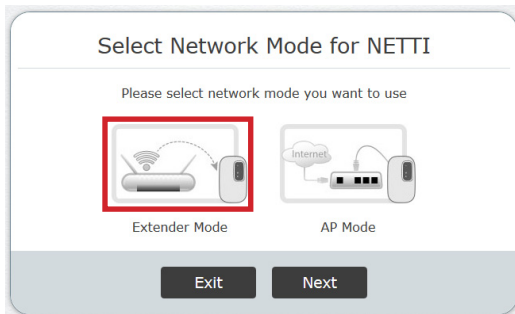
The image shows the NETTI login interface. At the top is the NETTI logo with the tagline 'Wisely connected'. Below it are two input fields: 'User Name : admin' and 'Password :'. A red rectangle highlights both input fields. Below the password field is a checkbox labeled 'Remember Password'. At the bottom are two buttons: 'OK' and 'Cancel'.

- c) Click **Next** to continue.



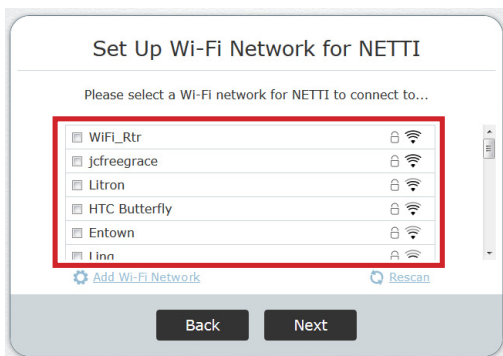
The image shows the 'Set Up Wi-Fi Network for NETTI' screen. It contains the text: 'Your NETTI doesn't extend any Wi-Fi network yet. Please click "Next" to set up NETTI or Click "Exit" to go to System Status Page.' At the bottom are two buttons: 'Exit' and 'Next'.

- d) Select **Extender Mode** and click **Next**.



The image shows the 'Select Network Mode for NETTI' screen. It asks the user to 'Please select network mode you want to use'. There are two options: 'Extender Mode' and 'AP Mode'. The 'Extender Mode' option, which includes an icon of a router and a device, is highlighted with a red rectangle. At the bottom are two buttons: 'Exit' and 'Next'.


- e) Select a Wi-Fi router and click **Next**.



The image shows the 'Set Up Wi-Fi Network for NETTI' screen. It asks the user to 'Please select a Wi-Fi network for NETTI to connect to...'. A list of available networks is shown, with a red rectangle highlighting the first five: 'WIFI\_Rtr', 'jcfreegrace', 'Litron', 'HTC Butterfly', and 'Entown'. Each network has a checkbox and a Wi-Fi signal icon. Below the list are links for 'Add Wi-Fi Network' and 'Rescan'. At the bottom are two buttons: 'Back' and 'Next'.



- f) Enter the router's password if needed. Click **Connect** to continue.



Set Up Wi-Fi Network for NETTI

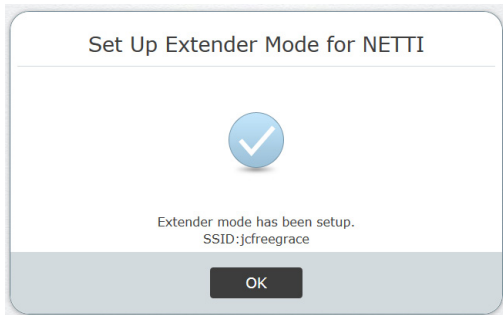
Enter password of Wi-Fi network to connect to your device.

Extended Network: jcfreegrace

Password: [password field] ☐ Show Password

Back Connect

- g) Click **OK** when you see the confirmation message.

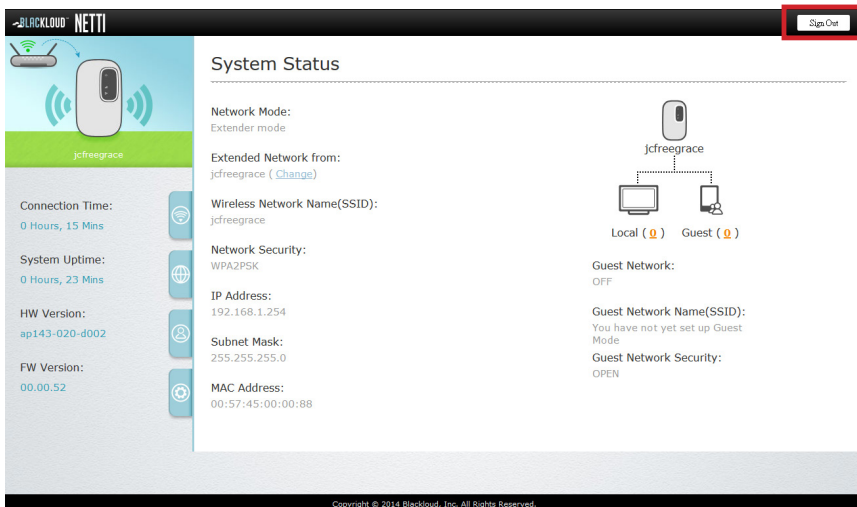


Set Up Extender Mode for NETTI

Extender mode has been setup.  
SSID:jcfreegrace

OK

- h) The home page of the web-based user interface will appear. Click **Sign Out**.



BLACKCLOUD NETTI

Sign Out

System Status

Network Mode: Extender mode

Extended Network from: jcfreegrace (Change)

Wireless Network Name(SSID): jcfreegrace

Network Security: WPA2PSK

IP Address: 192.168.1.254

Subnet Mask: 255.255.255.0

MAC Address: 00:57:45:00:00:88

Connection Time: 0 Hours, 15 Mins

System Uptime: 0 Hours, 23 Mins

HW Version: ap143-020-d002

FW Version: 00.00.52

Local (0) Guest (0)

Guest Network: OFF

Guest Network Name(SSID): You have not yet set up Guest Mode

Guest Network Security: OPEN

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#### 4. Move your NETTI

Plug your NETTI to an outlet where you want to extend your router's Wi-Fi connection. Your NETTI will connect to your router automatically. If the Signal Strength LED reads at least 3 bars, you can use your NETTI at this location.

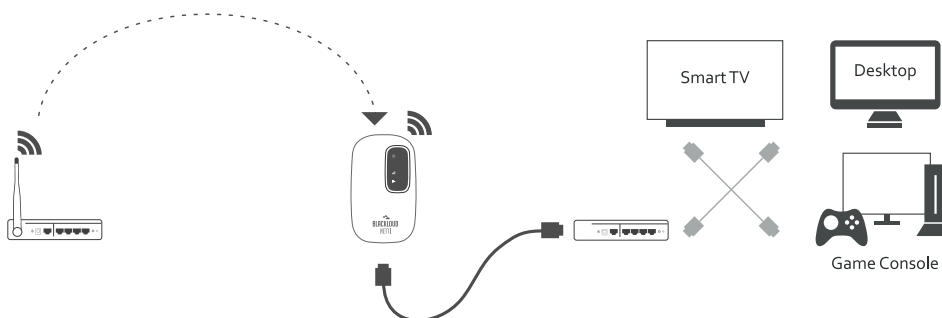


#### 5. Your Wi-Fi connection is extended

- Your Wi-Fi signal now covers a wider area than before.



- Alternatively your NETTI can serve as a Wi-Fi-to-LAN bridge by connecting an Ethernet switch to the Ethernet port on your NETTI.



### App Setup

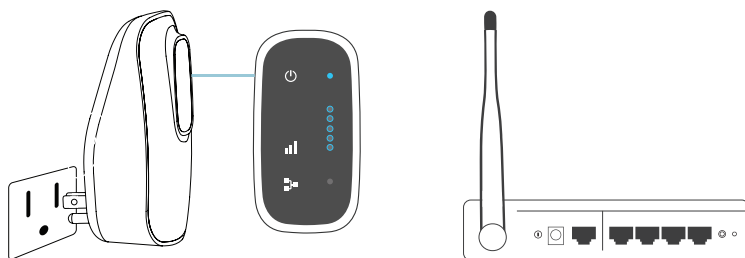
#### 1. Install the NETTI app

On your mobile device, download and install the NETTI app from either the Google Play Store or the iOS App Store.



## 2. Plug your NETTI into a power outlet

Plug your NETTI into a power outlet near your Wi-Fi router. If the signal strength LEDs are either flashing (first time setup) or unlit (no signal), proceed with setup.

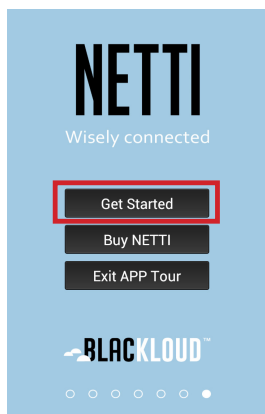


## 3. Start the NETTI app

- a) Make sure that Wi-Fi is enabled on your mobile device, then launch the NETTI app. Navigate through the app tour by swiping left.



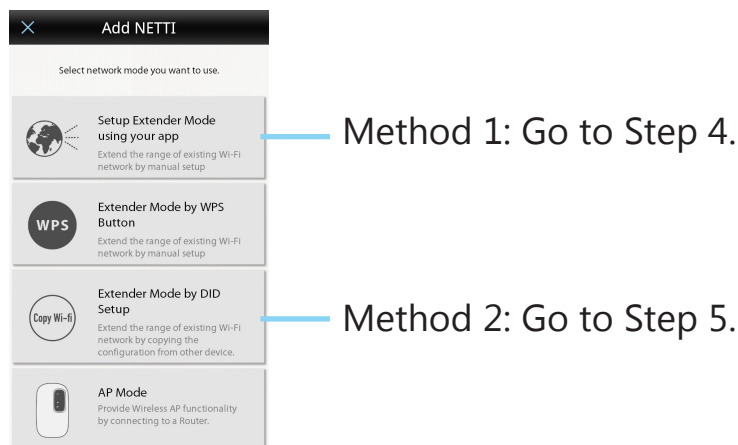
- b) When you get to the **NETTI** startup page, select **Get Started**.



- c) There are two methods to connect both your NETTI and your mobile device to your Wi-Fi router:

Method 1 – Manually setup Wi-Fi for your NETTI

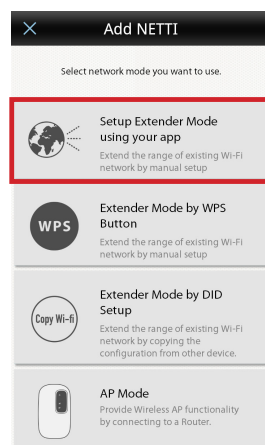
Method 2 – Copy Wi-Fi setup from another BLACKLOUD device to your NETTI



#### 4. *Manually Setting Up a Wi-Fi Connection*

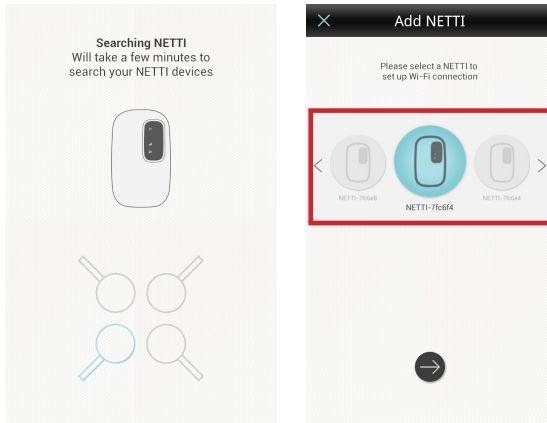
Choose this Wi-Fi setup method if either your NETTI is your first BLACKLOUD device that needs configuring or if you wish to setup your NETTI with a new Wi-Fi configuration, a new Wi-Fi router, etc.

- a) When you get to the **Add NETTI** selection page, select **Setup Extender Mode using your app**.



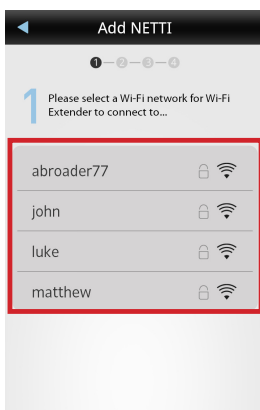
- b)** The app will automatically discover your NETTI. If more than one NETTI is discovered, select your NETTI from the list, then tap ➡ to continue.

NOTE: If you are using an iPad or an iPhone, you may first need to connect to your NETTI manually via Wi-Fi by searching for your NETTI's SSID in your iPad or iPhone's list of Wi-Fi connections.

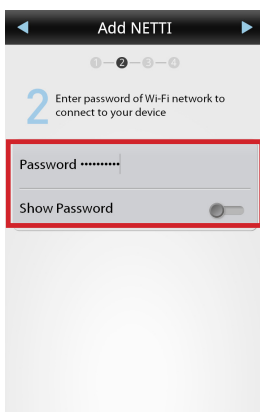


- c)** Select your Wi-Fi router.

NOTE: If you are using an iPad or an iPhone, you may first need to connect to your NETTI manually via Wi-Fi by searching for your NETTI's SSID in your iPad or iPhone's list of Wi-Fi connections.

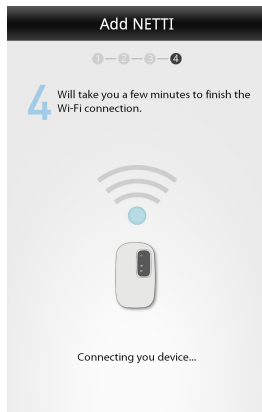


- d)** Enter a password if needed. Tap ▶ to continue.

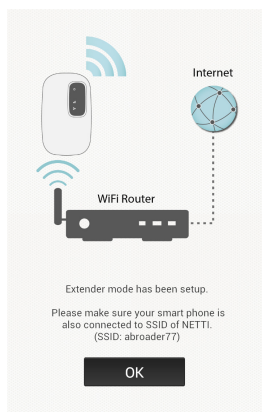


- e) The app will connect both your NETTI and your mobile device to the router that you have selected.

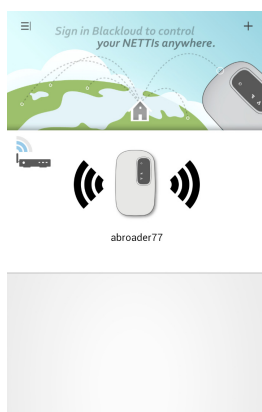
NOTE: If your mobile device is not automatically connected to your NETTI after this step, connect your mobile device to your NETTI manually via Wi-Fi by searching for your NETTI's SSID in your mobile device's list of Wi-Fi connections.



- f) Tap **OK** on the confirmation message.



- g) When the NETTI device appears in the NETTI app's main screen, your NETTI is wirelessly connected.

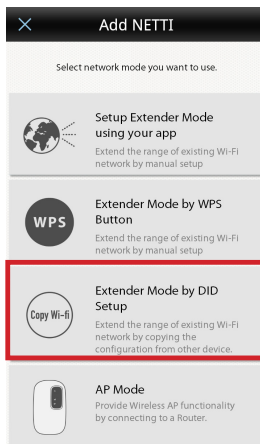


## 5. Copying Wi-Fi Setup

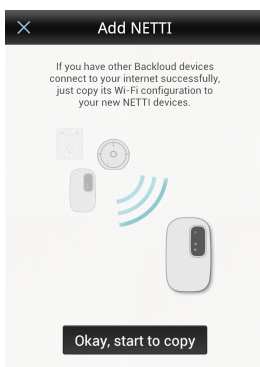
If you already own another BLACKLOUD Wi-Fi device which has been successfully connected to the Wi-Fi network, you have the option of directly copying its Wi-Fi configuration to your BUZZI device for Wi-Fi connection.

NOTE: If you are using an iPad or an iPhone, you may first need to connect to your BUZZI manually via Wi-Fi by searching for your BUZZI's SSID in your iPad or iPhone's list of Wi-Fi connections.

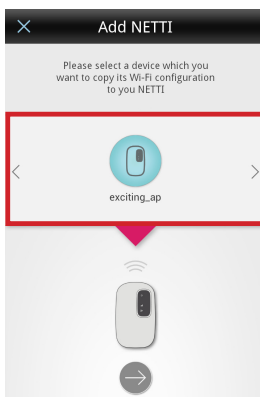
- a) When you get to the **Add NETTI** selection page, select **Extender Mode by DID Setup**.



- b) To proceed with Wi-Fi duplication, click **Okay, start to copy**.



- c) Select the BLACKLOUD device that you want to copy the Wi-Fi configuration from, then tap ➡ to continue.

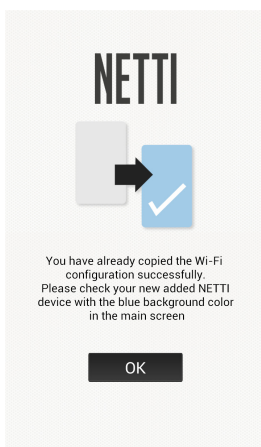


- d) Select your NETTI, then tap ➔ to continue.

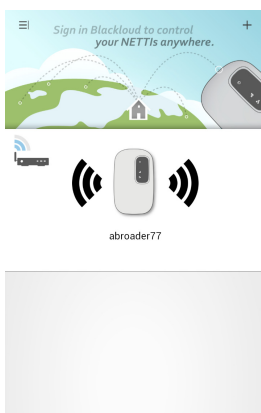


- e) Tap **OK** on the confirmation message.

NOTE: If your mobile device is not automatically connected to your NETTI after this step, connect your mobile device to your NETTI manually via Wi-Fi by searching for your NETTI's SSID in your mobile device's list of Wi-Fi connections.



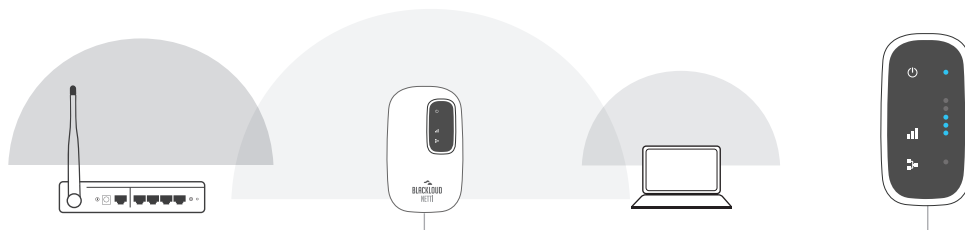
- f) When the NETTI device appears in the NETTI app's main screen, your NETTI is wirelessly connected.





## 6. Move your NETTI

Plug your NETTI to an outlet where you want to extend your router's Wi-Fi connection. Your NETTI will connect to your router automatically. If the Signal Strength LED reads at least 3 bars, you can use your NETTI at this location.

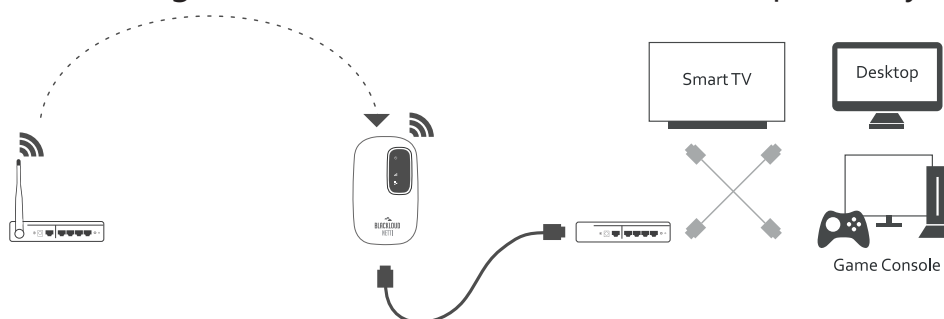


## 7. Your Wi-Fi connection is extended

- Your Wi-Fi signal now covers a wider area than before.



- Alternatively your NETTI can serve as a Wi-Fi-to-LAN bridge by connecting an Ethernet switch to the Ethernet port on your NETTI.

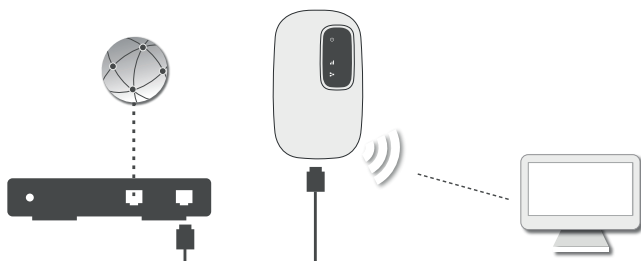


# Setting Up AP (Access Point) Mode

## Function

Using your NETTI in AP Mode provides you the following functions:

- LAN-to-Wi-Fi adapter for your internet-connected router



Choose one method to set up your NETTI:

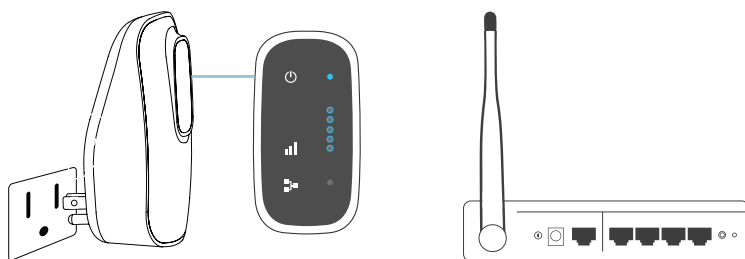
Method One → Web Browser Setup

Method Two → APP Setup

## Method One: Web Browser Setup

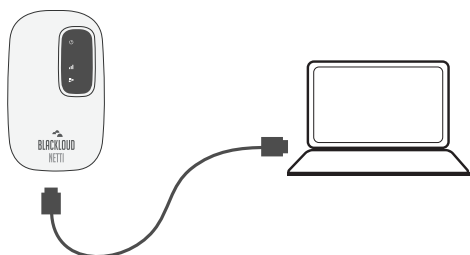
### 1. Plug your NETTI into a power outlet

Plug your NETTI into a power outlet near your Wi-Fi router. If the signal strength LEDs are flashing (first time setup) or unlit (no signal), proceed with setup.

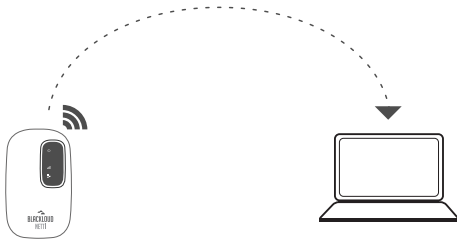


### 2. Connect your NETTI to a computer

- Connect your NETTI to your computer with the Ethernet cable.



- Alternatively, you can connect your NETTI to your computer wirelessly. Enable Wi-Fi connection on your computer. Select the SSID **NETTI\_xxxx** and click **Connect**.



### 3. Configure your NETTI with the web-based user interface

- a) Open a web browser. Enter the default IP address <http://192.168.1.254>.

NOTE: Please refer to the Appendix section "Setting Your Computer to a Static IP Address" if your computer is connected to your NETTI with an Ethernet cable and you cannot see the web user interface.

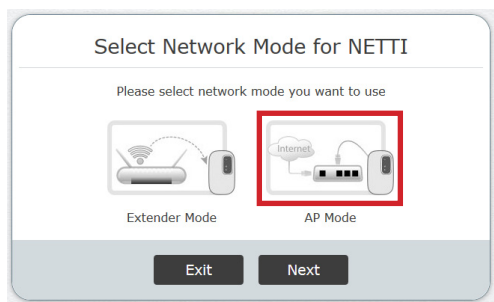
- b) Enter the default username (**admin**) and password (**admin**), then click **OK**.

A screenshot of the NETTI web-based user interface. At the top, the NETTI logo is displayed with the tagline "Wirelessly connected". Below the logo, there are two input fields: "User Name :" with the text "admin" entered, and "Password :". The password field is highlighted with a red rectangular box. Below the password field is a checkbox labeled "Remember Password". At the bottom of the form are two buttons: "OK" and "Cancel".

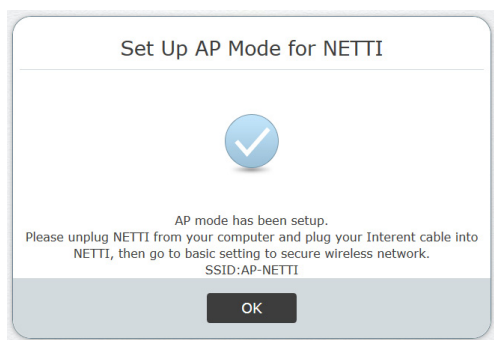
- c) Click **Next** to continue.

A screenshot of the NETTI web-based user interface showing the "Set Up Wi-Fi Network for NETTI" screen. The title "Set Up Wi-Fi Network for NETTI" is at the top. Below the title, a message states: "Your NETTI doesn't extend any Wi-Fi network yet. Please click 'Next' to set up NETTI or Click 'Exit' to go to System Status Page." At the bottom of the screen are two buttons: "Exit" and "Next".

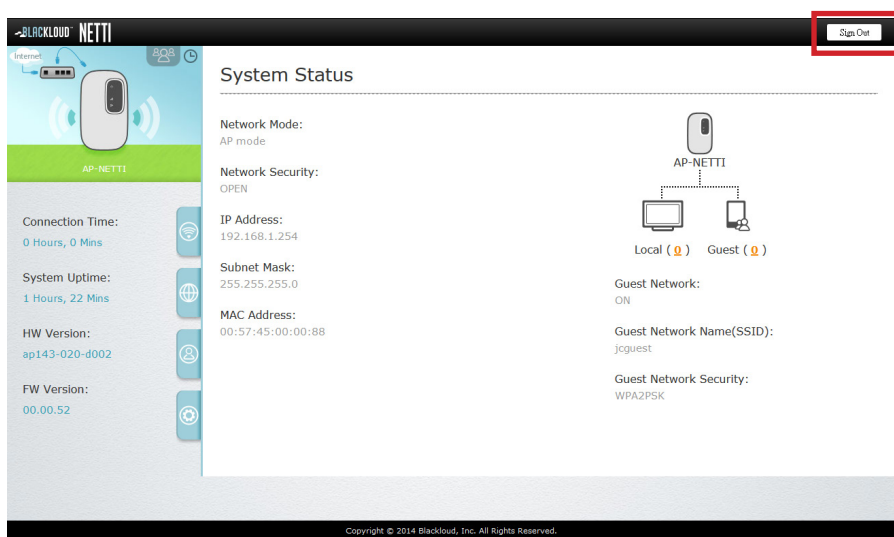
- d) Select **AP Mode** and click **Next**.



- e) Your NETTI will be set to AP Mode. Click **OK** at the confirmation message.

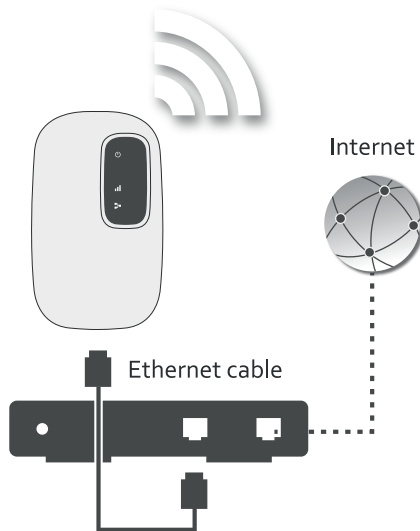


- f) The home page of the web user interface will appear. Click **Sign Out**.



#### 4. *Connect your NETTI to your router*

Plug your NETTI to an outlet where you want to setup the Wi-Fi AP (access point) for your router. Connect your NETTI to your router with an Ethernet cable.



#### 5. *Your network connection is extended*

Your Wi-Fi signal now extends your network connection wirelessly.



### Method Two: App Setup

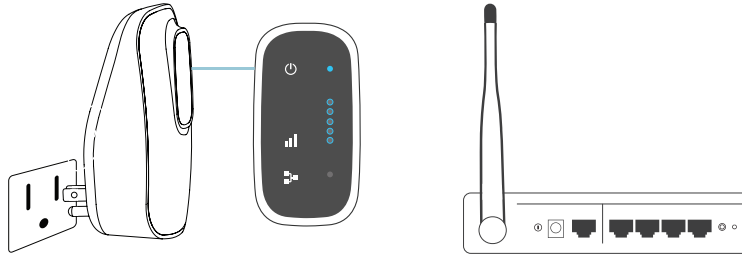
#### 1. *Install the NETTI app*

On your mobile device, download and install the NETTI app from either the Google Play Store or the iOS App Store.



## 2. Plug your NETTI into a power outlet

Plug your NETTI into a power outlet near your Wi-Fi router. If the signal strength LEDs are either flashing (first time setup) or unlit (no signal), proceed with setup.

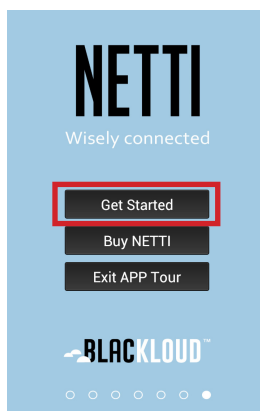


## 3. Start the NETTI app

- a) Make sure that Wi-Fi is enabled on your mobile device, then launch the NETTI app. Navigate through the app tour by swiping left.

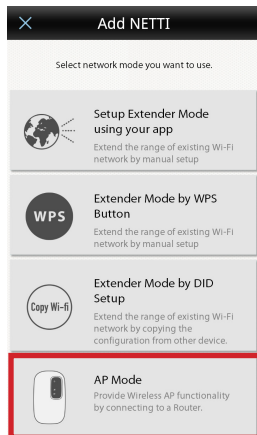


- b) When you get to the **NETTI** startup page, select **Get Started**.



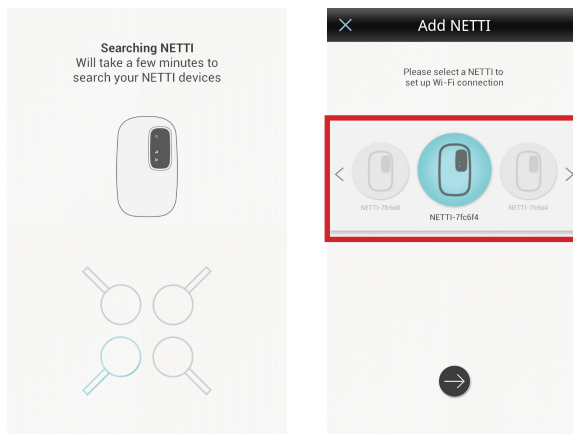
#### 4. Manually Setting Up Wi-Fi Connection in AP (Access Point) Mode

- a) When you get to the **Add NETTI** selection page, select **AP Mode**.



- b) The app will automatically discover your NETTI. If more than one NETTI is discovered, select your NETTI from the list, then tap ➔ to continue.

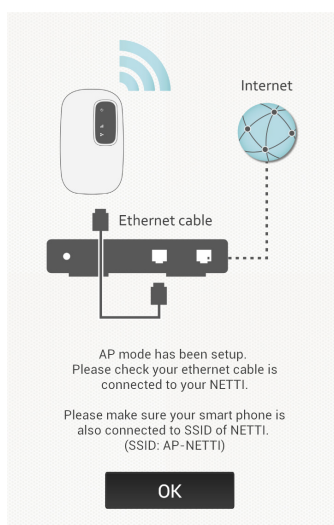
NOTE: If you are using an iPad or an iPhone, you may first need to connect to your NETTI manually via Wi-Fi by searching for your NETTI's SSID in your iPad or iPhone's list of Wi-Fi connections.



- c) The app will automatically set your NETTI to AP mode.

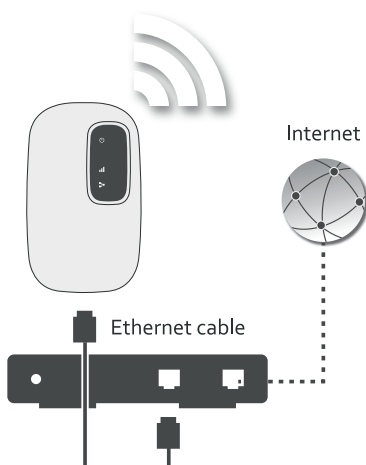


- d) Tap **OK** on the confirmation message. Note that the default SSID will be AP-NETTI.



## 5. *Connect your NETTI to your router*

- a) Plug your NETTI to an outlet where you want to setup the Wi-Fi AP for your router. Connect your NETTI to your router with an Ethernet cable.





- b) Connect your mobile devices to your NETTI via Wi-Fi using the default SSID (**AP-NETTI**). Ensure that your NETTI device appears in the NETTI app's main screen.

NOTE: You can change your NETTI's SSID and Wi-Fi security settings later in the NETTI app.



## 6. *Your network connection is extended*

Your Wi-Fi signal now extends your network connection wirelessly.

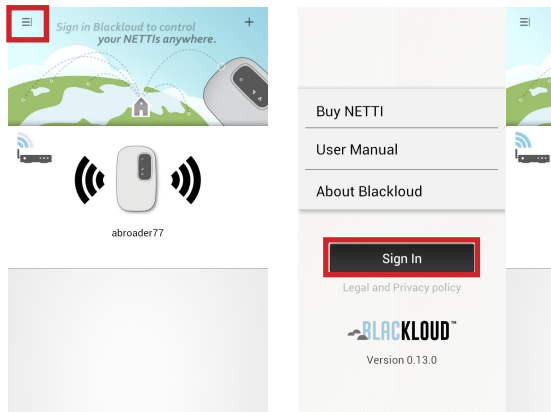


# Setting Up Remote Access

Remote access is a special feature that allows you to access and control your NETTI anywhere with an internet connection.

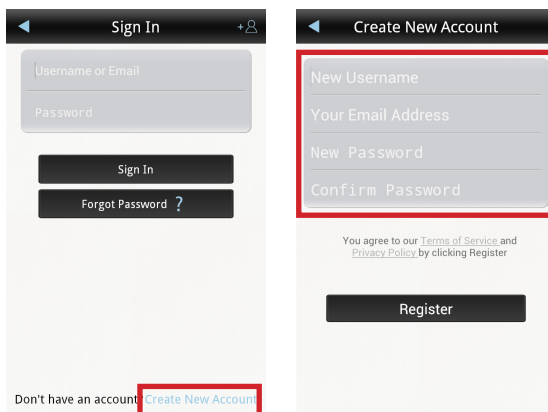
## Sign in with a BLACKCLOUD account.

1. From the NETTI app's main screen, tap  and select **Sign In**.



2. If you already have a BLACKCLOUD account, you can skip the BLACKCLOUD account creation and activation process and go to step 3.

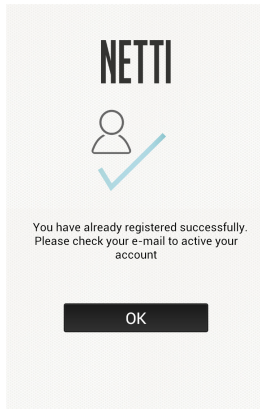
If you do not have a BLACKCLOUD account, tap **Create New Account**. Enter the following registration information in the fields indicated, then tap **Register**:



Field	Description
Username	Enter the desired username for your BLACKCLOUD account.
E-mail Address	Enter the email address for registering and maintaining your BLACKCLOUD account.
Password	Enter the desired password for your BLACKCLOUD account.
Confirm Password	Enter the same password again. If it matches the password you have created above, a check mark will appear.

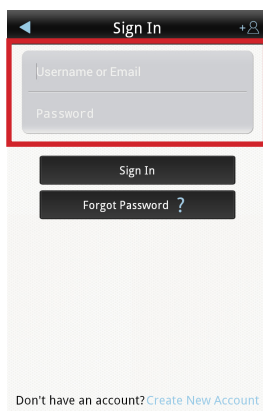
After you have tapped **Register**, the app confirmation page will appear, and an account activation email will be sent to the email address you have provided. Open this email and click or tap the activation link. A confirmation message will appear to indicate that your BLACKLOUD account is successfully activated.

Tap **OK** to return to the **Sign In** page.

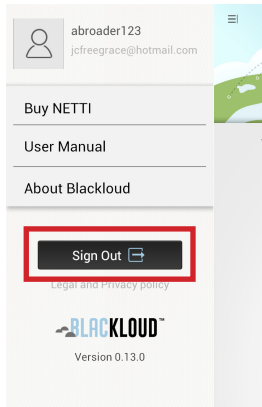


3. At the **Sign In** page, enter the username/email and the password of your BLACKLOUD account, then tap **Sign In** to continue.

NOTE: If you forgot your password, tap **Forgot Password?**, and follow instructions sent to your email account to reset your BLACKLOUD account with a



- After you have successfully signed in with your BLACKCLOUD account, the account name and the associated email address will appear on the top portion of the *Options* page. Swipe your finger left to retract the *Options* page and return to the main page. If you need to sign out of your BLACKCLOUD account, tap the **Sign Out** button.

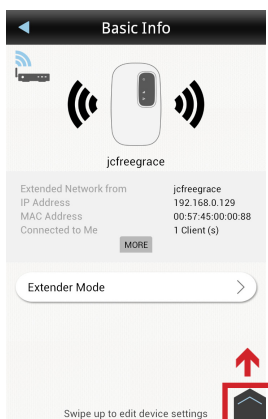


## Enable Remote Access

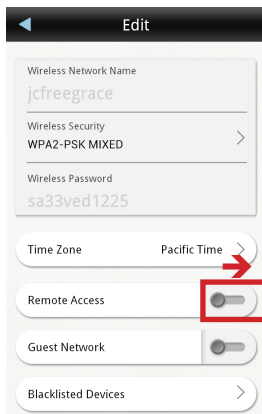
- After you have signed in with your BLACKCLOUD account, tap your NETTI in the main screen of the NETTI app:



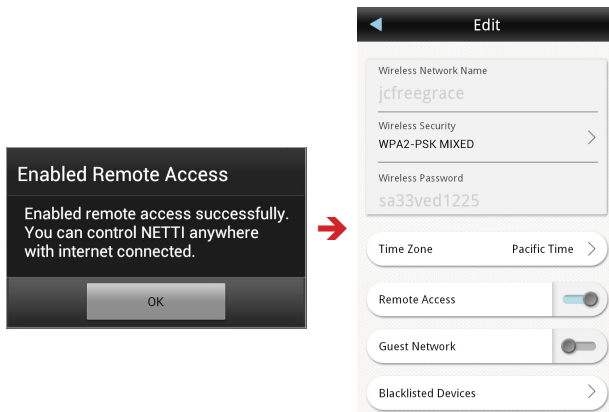
- On the **Basic Info** page, swipe the bottom right tab up to edit the device settings.



3. On the **Edit** page, swipe the **Remote Access** switch right to enable remote access.

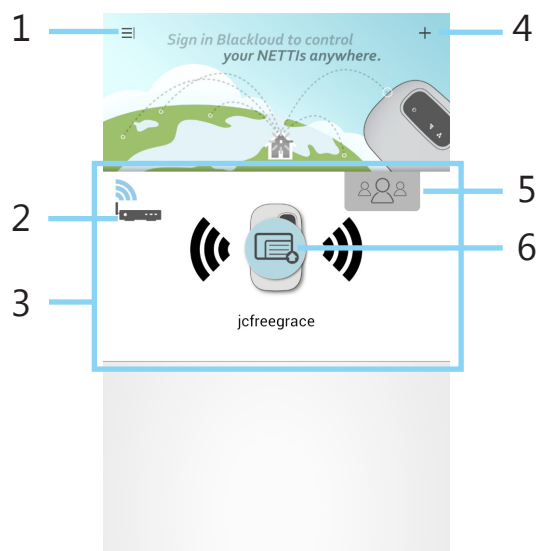


4. After tapping OK at the confirmation message, **Remote Access** will turn on. You can now control your NETTI via the NETTI app anywhere with an internet connection.





# Using and Configuring Your NETTI App


## Main Screen Control Features

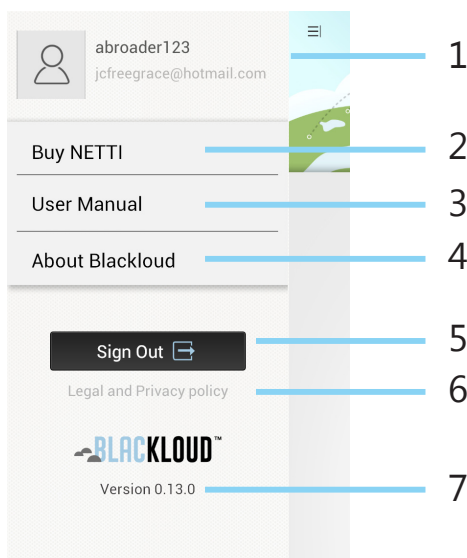


Most of your NETTI's control features can be accessed in the main screen.

1. **Options button:** Tap to access the *Options* page where you can set up an IR remote controller, purchase another NETTI, download the user manual, and manage your BLACKLOUD account.
2. **Network mode icon:** The  icon indicates that your NETTI is set to Extender Mode, whereas the  icon indicates that it is set to AP Mode.
3. **Device area:** Displays the current NETTI device name. Tap to access the *Basic Info* page and *Edit* page for your NETTI.  
Different background colors/icons for the button indicate the different statuses of the current NETTI device:
4. **Add NETTI button:** Tap if you need to setup Wi-Fi connection without the **Getting Started** setup wizard. Please refer to the section "Manually Setting Up Wi-Fi Connection" for more details.
5. **Guest Network icon:** If the guest network is enabled, this icon will appear. If the central figure has a clock sign, the timed access control is also enabled. Please refer to "Guest Network" for more details.
6. **Firmware Upgrade button:** This button appears only if the NETTI app has found a downloadable firmware upgrade online for your NETTI. Tap this button and select **OK** to proceed with firmware upgrade. If firmware upgrade fails for some reason (e.g. power outage during firmware upgrade), your NETTI will automatically restore itself to its backup firmware the next time it powers on. Please refer to "Rescue Mode" in the Appendix for more details.

## Options Page

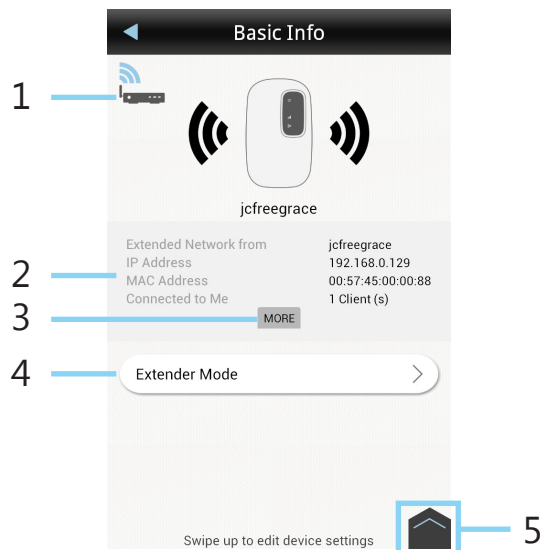
This page is accessed by tapping  in the main screen. To return to the main screen, retract this page by swiping it to the left.





1. **BLACKLOUD account status:** Displays the username and the associated email address of the BLACKLOUD account. This field is empty if you have not signed in to your BLACKLOUD account.
2. **Buy NETTI:** Links to the NETTI product webpage of the BLACKLOUD online store. Follow the webpage instructions to purchase one or more NETTI(s) online.
3. **User Manual:** Links to download an electronic copy of this NETTI user manual.
4. **About BLACKLOUD:** Links to the BLACKLOUD company information webpage.
5. **Sign In / Sign Out button:** Tap **Sign In** to begin remote access by signing in to your BLACKLOUD account, or tap **Sign Out** to end remote access by signing out of your BLACKLOUD account. Please refer to the section "Setting Up Remote Access" for more details.
6. **Legal and Privacy Policy:** Links to the BLACKLOUD *Legal and Privacy Policy* webpage.
7. **App Version:** Displays the version number of this NETTI app.

## Basic Info Page

This page is accessed by tapping the Device area in the main screen. To return to the main screen, tap .



1. **Network mode icon:** The icon  indicates Extender Mode, whereas the icon  indicates AP Mode.
2. **Network information:** Displays your NETTI's current network information.

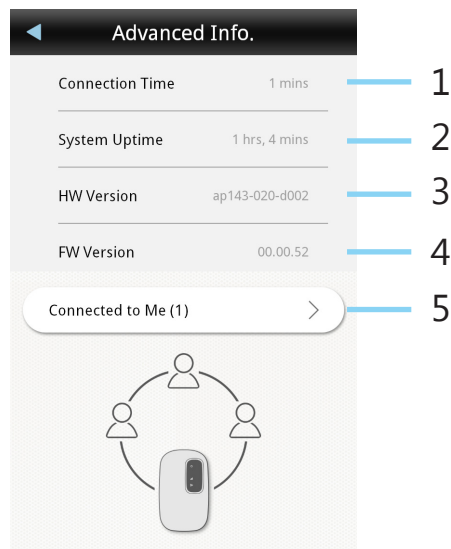
Field	Description
Extended Network from:	In Extender Mode, this field displays the SSID of the router that your NETTI extends network from. In AP Mode, this field displays 'Home'.
IP address:	Displays your NETTI's assigned IP address after setting up its connection.
MAC Address:	Display your NETTI's MAC address.
Connected to Me:	Displays the number of clients currently connected to your NETTI.

3. **MORE button:** Tap to access the Advanced Info page.
4. **Network mode button:** Displays whether your NETTI is currently in Extender Mode or AP Mode. To change the network mode, tap this button and select a different mode, then tap the **Update** button that appears.
5. **Edit device settings tab:** Swipe this tab up to access the Edit page to configure device settings.

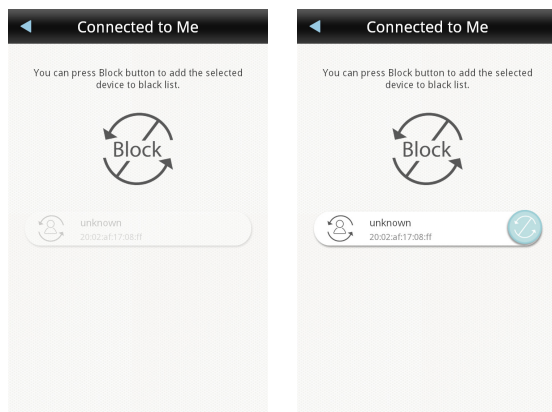


## Advanced Info Page





This page is accessed by tapping the **MORE** button in the *Basic Info* page. To return to the *Basic Info* page, tap .

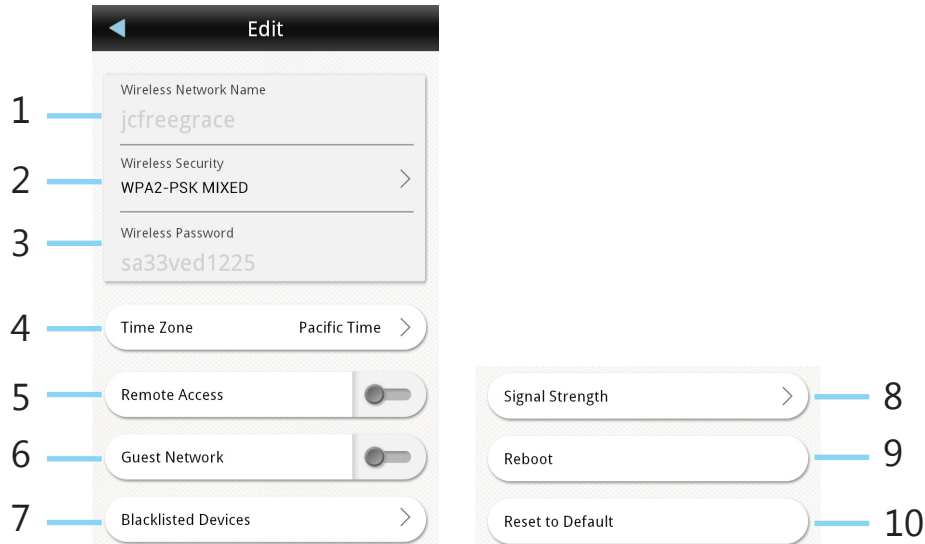


1. **Connection Time:** Displays the amount of time that the clients are connected to your NETTI
2. **System Uptime:** Displays the time elapsed since your NETTI was powered up
3. **HW Version:** Displays the current hardware version
4. **FW Version:** Displays the current firmware version
5. **Connected to Me:** Displays the number of clients that are connected to your NETTI. Tap this button to list each client device's MAC address with the option to tap and add any device (except *This Phone*) to the black list. A device that is blocked will be grayed out.



## Edit Page



This page is accessed by swiping the  tab up on the Basic Info page. To return to the Basic Info page, tap . If changes are made on this page, tap  to save changes or tap  to discard changes.

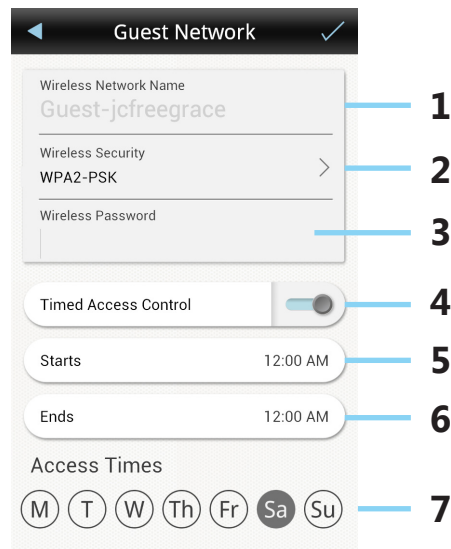


1. **Wireless Network Name:** Displays your NETTI's SSID (initially the Wi-Fi router's SSID). Tap to enter another SSID for your NETTI.
2. **Wireless Security:** Displays the current Wi-Fi encryption method. Tap to change wireless security settings. The options are **OPEN** (unsecured), WEP, **WPA-PSK**, **WPA2-PSK**, and **WPA-2 PSK MIXED**.
3. **Wireless Password:** Displays your NETTI's current wireless password (initially inherited from your Wi-Fi router). Tap to enter another password for your NETTI.
4. **Time Zone:** Displays the current time zone. Tap to set the time zone.
5. **Remote Access:** After logging in to the BLACKCLOUD account, swipe the switch to enable or disable remote access. Please see the section "Setting Up Remote Access" for more details.
6. **Guest Network:** Swipe the switch to enable or disable guest network (also useful for parental network control). Tap **Guest Network** to access the Guest Network page for configurations. Please refer to "Guest Network" for more details.
7. **Blacklisted Devices:** Tap to edit and set blacklisted devices.
8. **Signal Strength:** Tap to view and set signal strength. The settings are **Low (30%)**, **Middle (60%)**, and **High (100%)**.
9. **Reboot:** Tap to reboot your NETTI.
10. **Reset to Default:** Tap to reboot your NETTI to default settings.

## Guest Network Page



The *Guest Network* page allows you to specify and set up a separate SSID with Timed Access Control, which is useful for the network administrator to control guests' internet access or for parents to control their children's internet access.

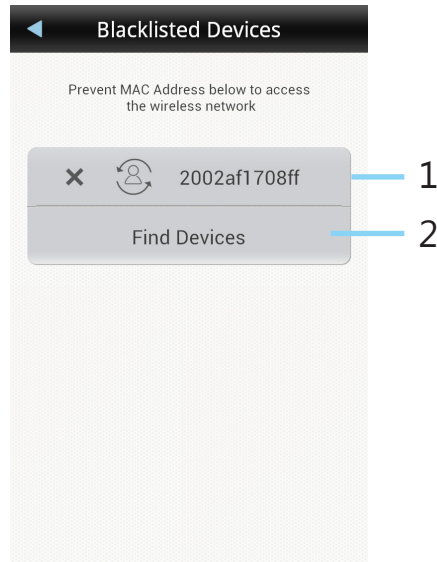
This page is accessed by tapping **Guest Network** on the *Edit* page. To return to the *Edit* page, tap . If changes are made on this page, tap  to save changes.



1. **Wireless Network Name:** Displays your NETTI's guest network SSID. Tap to enter another guest network SSID for your NETTI.
2. **Wireless Security:** Displays the current Wi-Fi encryption method. Tap to change wireless security settings. The options are **OPEN** (unsecured), **WEP**, **WPA-PSK**, **WPA2-PSK**, and **WPA-2 PSK MIXED**.
3. **Wireless Password:** Displays your NETTI's current guest network wireless password. Tap to enter another guest network password for your NETTI.
4. **Timed Access Control:** Swipe the switch to enable or disable the timed access control feature. If enabled, the following three parameters will appear.
5. **Starts:** Tap to specify start time of guest network access.
6. **Ends:** Tap to specify end time of guest network access.
7. **Access Times:** Tap to enable or disable each day of the week for allowing guest network access. The day(s) selected will be highlighted in dark gray.


## Blacklisted Devices Page

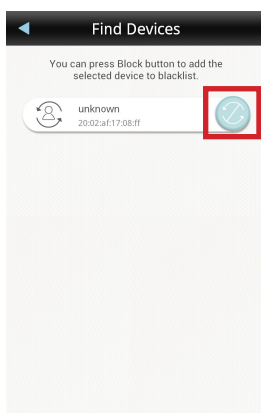
This page is accessed by tapping Blacklisted Devices in the Edit page. To return to the Edit page, tap . If changes are made on this page, tap  to save changes.



1. **Blacklisted Devices:** Lists the MAC addresses of the blacklisted devices. Tap an **X** to remove a device from the blacklist.
2. **Find Devices:** Tap to access the Find Devices page and find devices to be added to the blacklist.

## Find Devices Page

This page is accessed by tapping **Find Devices** in the Blacklisted Devices page. To return to the Blacklisted Devices page, tap .



Tap the block button besides a device to add that device to the blacklist.

# Configuring Your NETTI (Web UI)

## Accessing Web User Interface

Enter the default IP address `http://192.168.1.254` in a web browser. Enter the default username (**admin**) and password (**admin**), then click **OK**.

The web user interface's menus are organized as follows:



Home



Wireless



Network  
Setting




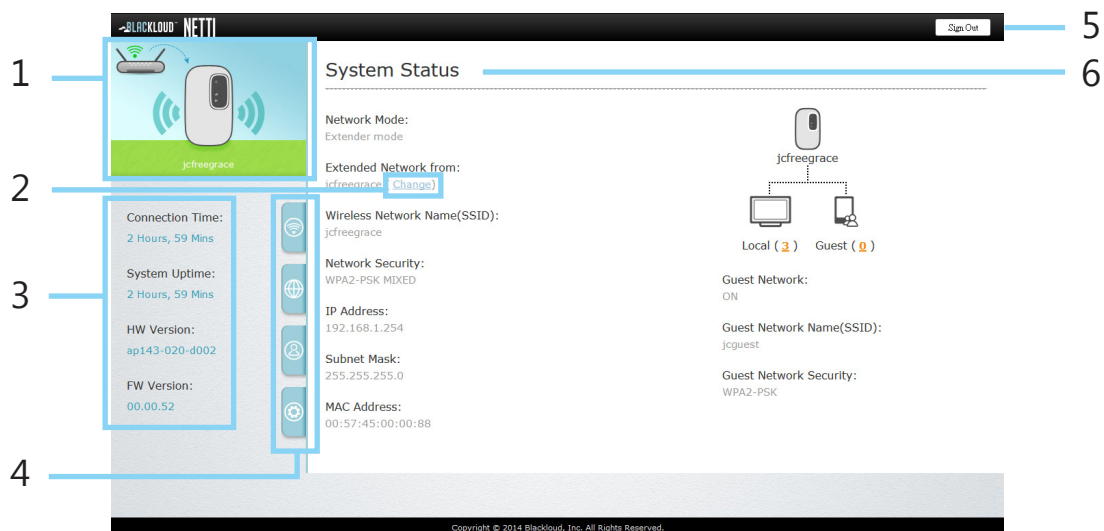
Guest  
Network







System Tools

## Home

The home menu of the web user interface appears when you first login or when you click the  menu tab in other menus:



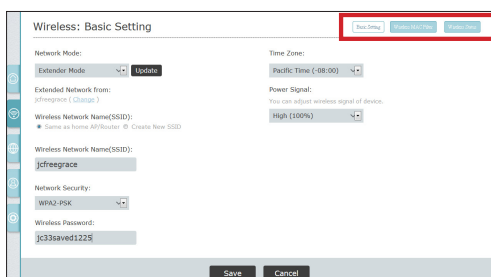
1. **Network Display:** Displays the network mode (  indicates Extender Mode,  indicates AP Mode) and your NETTI's SSID. Additionally,  indicates that guest network is enabled, and  indicates that timed access control is active for the guest network.
2. **Change\*:** Click this link to change the Wi-Fi router. You will be redirected to the Wi-Fi setup wizard. Please refer to "Web Browser Setup" section for more details.
3. **Network Information:** Displays connection time, system uptime, hardware version, and firmware version.

4. **Menu Tabs:** Click a menu tab to access its respective menu.
5. **Sign Out:** Click to log out of the web user interface.
6. **System Status:** Displays **Network Mode**, **Extended Network from\***, **Wireless Network Name(SSID)\***, **Network Security**, **IP Address**, **Subnet Mask**, **MAC Address**, network connection diagram, **Guest Network**, **Guest Network Name(SSID)**, and **Guest Network Security** information.

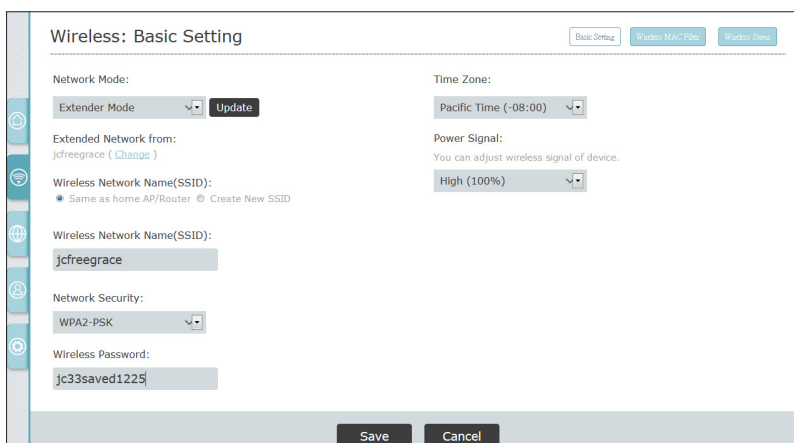
\* Not available in AP Mode

## Wireless

There are three sub-menus in the *Wireless* menu: *Basic Setting*, *Wireless MAC Filter*, and *Wireless Status*. Click each sub-menu's tab (located on the top-right corner of the *Wireless* menu) to access its respective submenu.



## Basic Setting



Here you can make the following configurations:

**Network Mode:** Select between **Extender Mode** and **AP Mode** from the drop-down menu. After making a selection, click **Update**.

**Extended Network from\*:** Displays the Wi-Fi router's SSID. Click the **Change** link to change the Wi-Fi router. You will be redirected to the Wi-Fi setup wizard. Please refer to "Web Browser Setup" section for more details.

**Wireless Network Name (SSID):** Specifies the SSID of your NETTI. For Extender Mode, you can set your NETTI SSID to be the same as that of the Wi-Fi router, or you can specify a different SSID for your NETTI.

**Network Security:** Displays the current Wi-Fi encryption method. Tap to change wireless security settings. The options are **OPEN** (unsecured), **WEP**, **WPA-PSK**, **WPA2-PSK**, and **WPA-2 PSK MIXED**.

**Wireless Password:** Displays your NETTI's current wireless password (initially inherited from your Wi-Fi router), or you can enter another password for your NETTI.

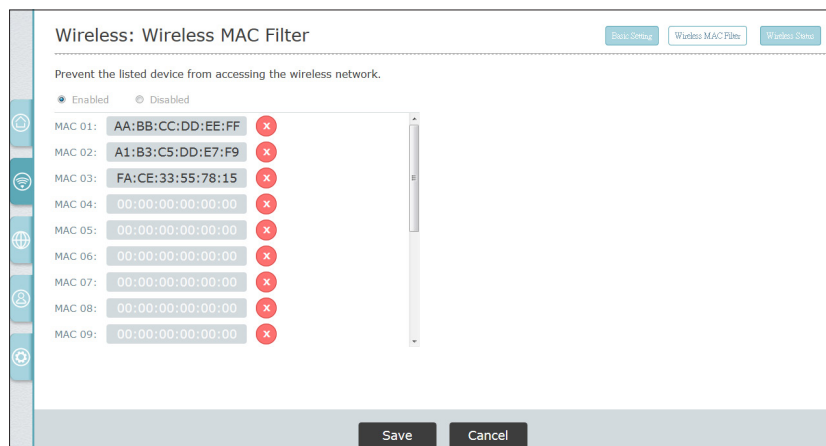
**Time Zone:** Displays the current time zone. You can set the time zone from the drop-down menu.

**Power Signal:** Select the appropriate Wi-Fi transmission power setting for your NETTI (there will be a trade-off between a strong signal and less electromagnetic radiation) from the drop-down menu. The settings are **Low (30%)**, **Middle (60%)**, and **High (100%)**.

\* Not available in AP Mode

Click **Save** to save changes, or click **Cancel** to discard changes.

## Wireless MAC Filter




Wireless: Wireless MAC Filter

Prevent the listed device from accessing the wireless network.

☒ Enabled ☐ Disabled

MAC 01:	AA:BB:CC:DD:EE:FF	x
MAC 02:	A1:B3:C5:DD:E7:F9	x
MAC 03:	FA:CE:33:55:78:15	x
MAC 04:	00:00:00:00:00:00	x
MAC 05:	00:00:00:00:00:00	x
MAC 06:	00:00:00:00:00:00	x
MAC 07:	00:00:00:00:00:00	x
MAC 08:	00:00:00:00:00:00	x
MAC 09:	00:00:00:00:00:00	x

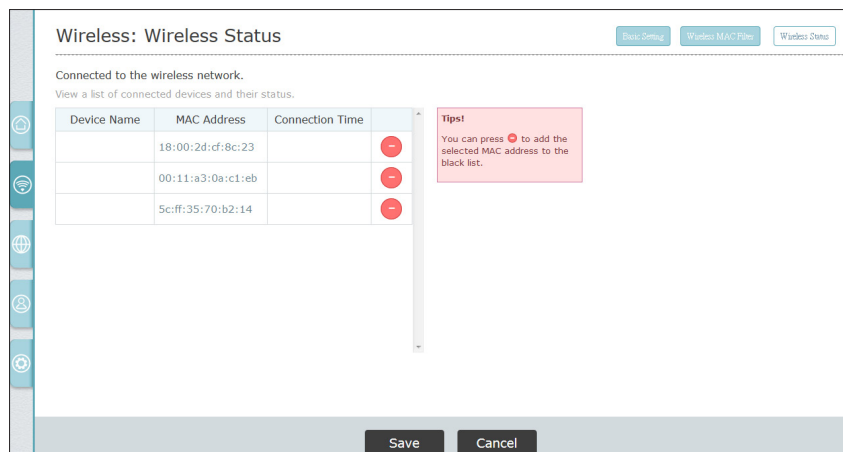
Save Cancel

Here you can enable or disable the wireless MAC filter. If the filter is enabled, you can enter up to 16 MAC addresses on the block list. To clear any blocked MAC address, click .



Click **Save** to save changes, or click Cancel to discard changes.

## Wireless Status



Wireless: Wireless Status

Connected to the wireless network.  
View a list of connected devices and their status.

Device Name	MAC Address	Connection Time	
	18:00:2d:cf:8c:23		-
	00:11:a3:0a:c1:eb		-
	Sc:ff:35:70:b2:14		-


**Tip:**  
You can press - to add the selected MAC address to the black list.

Save Cancel

Here you can view a list of connected devices and their status: **Device Name**, **MAC Address**, and **Connection Time**. You can click - to add the selected MAC address to the black list (MAC filter).

Click **Save** to save changes, or click **Cancel** to discard changes.

## Network Setting



Network Setting

IP Address: 192 . 168 . 1 . 254

Subnet Mask: 255 . 255 . 255 . 0

Save Cancel

The *Network Setting* menu allows you to specify the IP Address (initially 192.168.1.254) and Subnet Mask (usually 255.255.255.0) for your NETTI.

Click Save to **save** changes, or click **Cancel** to discard changes.



## Guest Network

The screenshot shows the 'Guest Network' configuration page. On the left is a vertical sidebar with icons for various settings. The main area is divided into two columns. The left column contains: 'Allow Guest Access' with radio buttons for 'Yes' (selected) and 'No'; 'Guest Network Name(SSID):' with a text field containing 'jcguest'; 'Network Security:' with a dropdown menu showing 'WPA2-PSK'; and 'Guest Network Password:' with a text field containing 'jc33saved1225'. The right column contains: 'Timed Access Control' with radio buttons for 'Yes' (selected) and 'No'; 'Days:' with checkboxes for 'Everyday' (checked), 'Mon', 'Tue', 'Wed', 'Thu', 'Fri', 'Sat', and 'Sun'; and 'Times:' with a radio button for '24 Hours' (selected), and 'From:' and 'To:' time pickers. The 'From:' picker shows 6:00 AM and the 'To:' picker shows 10:00 PM. At the bottom are 'Save' and 'Cancel' buttons.

The *Guest Network* menu allows you to specify and set up a separate SSID with Timed Access Control, which is useful for the network administrator to control guests' internet access or for parents to control their children's internet access.

**Allow Guest Access:** Select **Yes/No** to allow/deny guest access.

**Guest Network Name(SSID):** Enter an SSID for the guest network.

**Network Security:** Displays the current Wi-Fi encryption method. Tap to change wireless security settings. The options are **OPEN** (unsecured), **WEP**, **WPA-PSK**, **WPA2-PSK**, and **WPA-2 PSK MIXED**.

**Guest Network Password:** Displays your NETTI's current guest network password, or you can enter another password for your NETTI's guest network.

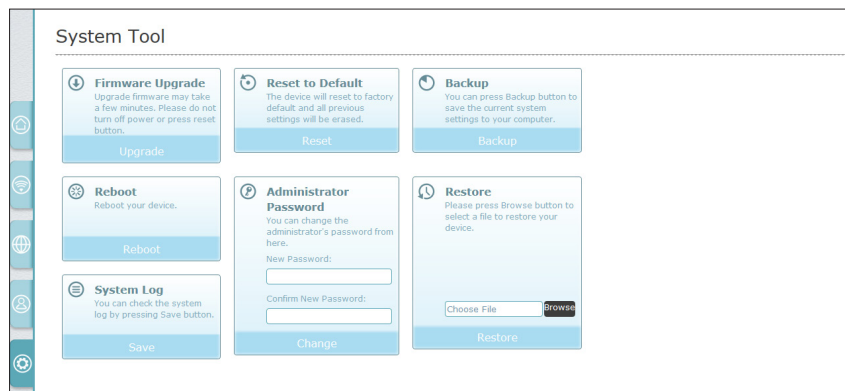
**Timed Access Control:** Select **Yes/No** to enable/disable timed access control.

**Days:** Specifies day(s) of the week in which the guest network is enabled.

**Times:** Specifies the time of each specified day in which the guest network is enabled. Selecting *24 Hours* will leave the guest network enabled for the entirety of each specified day. Selecting the From and To fields will allow you to specify the time period for the guest network to be enabled during each specified day.

Click **Save** to save changes, or click **Cancel** to discard changes.

## System Tools



The *System Tools* menu has tools to maintain, operate, and update your NETTI.

**Firmware Upgrade:** When your NETTI is connected to the internet, it will automatically check for and download any new firmware. If new firmware is found and is downloaded, the red letter N will flash. Click **Upgrade** to update your NETTI to the latest firmware version. When the upgrade is finished, the web user interface will revert back to the login page. Should firmware upgrade fail, your NETTI will rescue itself via Rescue Mode the next time it powers up. Refer to “Rescue Mode” in the Appendix section for more details.

**Reboot:** Click **Reboot** to reboot your NETTI.

**System Log:** Click **Save** to download and save a log file (recording all system activities since your NETTI was powered up) on your computer.

**Reset to Default:** Click **Reset** to restore your NETTI to its factory default settings.

**Administrator Password:** The initial login password for your NETTI’s web user interface is **admin**. To enhance network security, you can enter and confirm a new login password for your NETTI’s web user interface, then click **Change** to make password changes official.

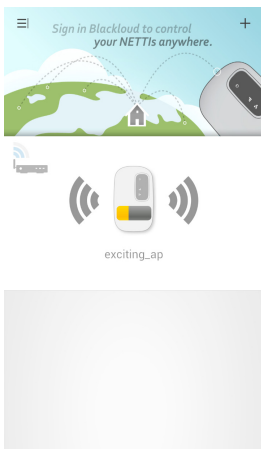
**Backup:** Click **Backup** to save your NETTI system settings as a configuration file on your computer.

**Restore:** Click **Restore** to restore your NETTI system settings from a configuration file saved on your computer.

# Appendix

## Rescue Mode

If your NETTI's firmware upgrade has failed (e.g. power outage during firmware upgrade), your NETTI will enter Rescue Mode. The next time you power on your NETTI, it will automatically restore itself with the emergency backup firmware stored internally. You can check the progress of the restoration by using your NETTI app to connect to your NETTI, and the NETTI app will display the progress of the rescue operation:



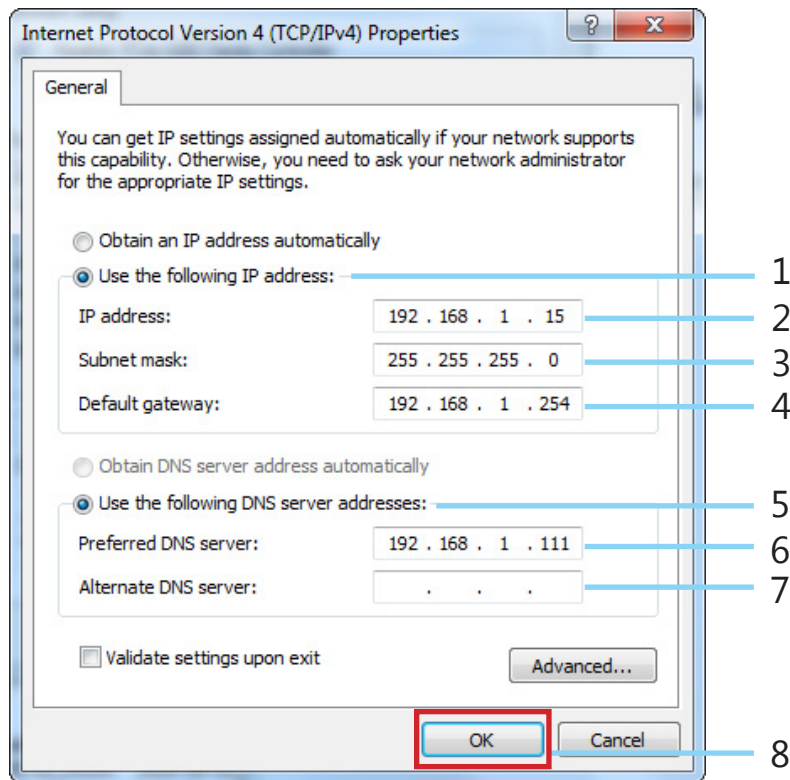
After the rescue operation is complete, your NETTI will revert to its initial state. Please refer to the section "Getting Started" to re-setup your NETTI.

## Setting Your Computer to a Static IP address

To access your NETTI's web user interface, you need to set your computer to a static IP address.

Access the IPv4 properties dialog using the following path:

**Control Panel → All Control Panel Items → Network and Sharing Center → Local Area Connection → Properties → Internet Protocol Version 4 (TCP/IPv4).**



1. Select **Use the following IP address:**
2. Enter your local IP address (typically from 192.168.1.10 to 192.168.1.99).
3. Enter your subnet mask address – usually 255.255.255.0.
4. Enter the local IP address of your NETTI – 192.168.1.254.
5. The option **Use the following DNS server addresses** will then be automatically selected.
6. Enter the preferred DNS server address (usually from your network administrator or network service provider).
7. (Optional) Enter the alternate DNS server address (usually from your network administrator or network service provider).
8. Click **OK** after making changes.

Re-access your NETTI's web user interface using the IP address <http://192.168.1.254>.

## Specifications

<b>Main Processor/ Radio Wi-Fi:</b>	QCA9531
<b>System RAM:</b>	32MB DDR1
<b>System Serial Flash ROM:</b>	8MB SPI flash
<b>System Power:</b>	110v-220v (Built-in 5V, 1A power module)
<b>Wireless Power</b>	802.11b/g/n
<b>Wireless Interface:</b>	IEEE 802.11n. Compatible with IEEE 802.11g and 802.11b. Operating at 2.4 GHz frequency band. Supports 20 and 40MHz bandwidths. 2T2R MIMO configuration. Support of transmission and reception of 2 spatial streams.
<b>Antenna System:</b>	2 internal antennas, (PCB antenna 2.5dBi)
<b>Power Consumption:</b>	3W (TBC)
<b>System Requirements:</b>	Microsoft® Windows® 98SE, NT, 2000, XP, Vista or Windows 7, 8, Mac OS, NetWare®, UNIX® or Linux.
<b>Operational Temperature:</b>	0°C to 40°C (32°F to 104°F)
<b>Storage Temperature:</b>	-20°C to 50°C
<b>Size and Weight:</b>	11.7 x 7.1 x 4.1 mm 105 g

## Troubleshooting

**Q:** My computer cannot connect to my NETTI.

**A:** Please make sure that your computer is properly connected to your NETTI via the Ethernet cable or that your computer's Wi-Fi connection is enabled.

**Q:** The NETTI app cannot find my NETTI.

**A:** Please make sure that Wi-Fi is enabled on your mobile device.

**Q:** I have setup my NETTI's Wi-Fi connection to my router, but the Wi-Fi signal is poor from my NETTI.

**A:** Your NETTI may be too far away from your router. Try to move and re-plug your NETTI to a power outlet closer to the router such that the Signal Strength LED reads at least 3 bars. If the signal strength is still unsatisfactory, try connecting your NETTI to your router with an Ethernet cable and set your NETTI to the AP mode.




**Q:** Why am I not able to sign in with my BLACKLOUD account after I have created it?

**A:** Please follow email instructions to activate your BLACKLOUD account.

**Q:** Why am I not able to access my NETTI remotely after I have signed in my BLACKLOUD account?

**A:** After you have signed in with your BLACKLOUD account, you will need to enable remote access in the **Edit** page. Please refer to "Enable Remote Access".

**Q:** Why are the changes made to settings not saved?

**A:** Please tap  after making changes. On some configuration pages, the  button is not available. In this case, please tap  after making changes.



## Glossary

<b>Ethernet Switch:</b>	A network device that connects devices together on the intranet (LAN, local area network) via Ethernet cables for data communications over the intranet.
<b>Router:</b>	A network device that bridges the internet (WAN, wide area network) and the intranet (LAN, local area network) so that the intranet devices can have internet access, and vice versa. Usually a router can assign network devices' IP addresses automatically.
<b>SSID (Service Set Identifier):</b>	An identification name for a wireless access point over the wireless local area network (WLAN). An SSID can be up to 32 alphanumeric characters which are case sensitive.
<b>Wi-Fi:</b>	A wireless standard that uses the 2.4 GHz and 5 GHz radio frequencies for wireless communications among computers, smartphones, tablets, and other electronic devices. Most commonly used Wi-Fi standards are 802.11a, 802.11b, 802.11g, and 802.11n.
<b>Wi-Fi Access Point:</b>	A device that allows wireless access of a wired network.
<b>Wi-Fi Encryption:</b>	A way of encoding wireless data to prevent unauthorized data interceptions by hackers during transmission. The most common Wi-Fi encryption methods are WEP, WPA-PSK, WPA2-PSK, and WPA-2 PSK mixed.
<b>Wi-Fi Router:</b>	A special type of router that combines the functionality of a router and a Wi-Fi access point.



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# Safety Information

## Safety Categories



Prohibited actions



Situations that need mandatory action



Situations that need attention

## Safety Information

To ensure safety of the product and its users, please follow the safety instructions below:



If the product does not have a power button, unplug the product from the power source to shut it off completely.



Do not attempt to disassemble, modify or repair this product by yourself, as this may cause a fire, electric shock or product damage and void product warranty.



The product is for indoor use only. Do not use the product outdoors.



Avoid using the product in hot or humid locations.



If the product becomes wet during operation, do not touch the product without unplugging it. Contact an experienced electrical technician for help.



Avoid disconnecting a cable from the product with excessive force.





Handle the product with care. Accidental damage will void product warranty.



Keep the product out of reach of children. The product contains small parts that can be dangerous to children under 3 years old.



To avoid product overheating, do not place the product on paper, cloth, or other flammable materials.



If you smell something burning inside the product or see smoke coming from the product, unplug the product immediately and contact your dealer for help.



There are no user-serviceable parts inside the product. If you experience problems with the product, please contact us or your dealer for assistance.



# Regulatory Information

## Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.